

FIG. 5 illustrates the sidelight cap of the invention as a part of an outswing handicap threshold assembly 41 (FIG. 2). Here, the sidelight cap 71, which is the same standard sidelight cap shown in FIG. 4, is shown mounted to the body of the threshold assembly covering the threshold portion thereof. However, for this installation, the sidelight cap has been adapted by breaking off a portion of the inwardly extending tabs 76 and 77 and a portion of the stop 78 along their respective score lines 86, 87, and 88 (FIG. 3). With this modification made to the threshold cap 71, the now shorter tabs 77 and 78 extend into the longitudinal grooves formed by dams 58 and 59 to snap and hold the threshold securely to the body of the assembly. As with the embodiment of FIG. 3, the sidelight cap may be cut to any desired length and selectively positioned along the length of the body of the threshold assembly to accommodate left, right, or double sidelight entryway systems and patio doors. Flexible fins 92, 83, and 84 form seals between the sidelight cap 71 and a sidelight panel, the exterior sill, and the interior sill respectively. It will thus be seen that the present invention includes a standard sidelight cap that is adaptable for use with both inswing and outswing handicap threshold assemblies.

FIG. 6 illustrates an alternate embodiment of the threshold assembly of this invention wherein the sidelight cap is mounted to a handicap sill of a slightly different configuration. Here, the threshold assembly 91 includes an elongated preferably extruded aluminum body 92 having a threshold portion 93 for underlying a closed door and an exterior sill 94 that extends outwardly and slopes downwardly from the threshold portion. An interior sill 96 slopes inwardly and downwardly from the threshold portion but, unlike prior embodiments, is substantially continuous with the upper surface of the threshold portion. A dam 97 and lip 98 are formed along the junction of the exterior sill and the threshold portion of the assembly and, together, they define a longitudinal groove extending along the junction.

The sidelight cap 99 has an upper support surface 101 that is positioned to overly the threshold portion 93 by an exterior leg 102 and an interior leg 103. An inwardly extending tab 104 extends into the longitudinal groove formed by the dam 97 and lip 98 and an inwardly extending tab 106 rests atop the interior sill 96. The sidelight cap is thus selectively positionable along the length of the body to accommodate various sidelight or patio door entryway systems. As with prior embodiments, the sidelight cap 99 is made of co-extruded plastic material and preferably has a lower durometer skin 108 and 112 on selected portions of the cap and also includes flexible sealing fins 109, 111, and 113 for sealing against a sidelight cap, the exterior sill, and the interior sill of the assembly. In fact, the sidelight cap of this embodiment can be the same standard sidelight cap illustrated with prior embodiments adapted for use with a threshold body profile slightly different from the profiles of FIGS. 1 and 2.

FIG. 7 illustrates a typical right hand sidelight entryway system incorporating the handicap threshold assembly of this invention. The entryway 116 includes vertical door jambs 117 and 118, which frame the entryway on either side, and an immediately positioned vertical mullion or mull post 119, which partitions the entryway into a door frame on the left and a sidelight frame on the right. A door 121 is mounted in the door frame and a sidelight panel 122 is mounted in the sidelight frame. According to the invention, a continuous handicap threshold assembly extends beneath the door and the sidelight panel and includes an extruded aluminum body 123 and a sidelight cap 124 mounted atop the body and positioned to underlie and support the sidelight

panel 122. It will be seen that a left hand sidelight entryway may also be accommodated simply by positioning the sidelight cap on the left side of the threshold body and a double sidelight entry may be accommodated by locating a sidelight cap on either end of the threshold body. In addition, a patio door entryway can be accommodated by positioning a sidelight cap beneath the fixed door of the entryway. The flexibility of this invention is thus apparent as is its continuous construction, which provides superior performance and reduces fabrication costs.

Finally, FIG. 8 is a perspective view of the threshold assembly of the invention showing a portion of the threshold body 12 and the threshold cap 71 being snapped into place on the body. From this figure, the selectively positionable and infinitely adaptable nature of the sidelight cap is apparent.

The invention has been described herein in terms of preferred embodiments and methodologies. It will be apparent to those of skill in the art, however, that various modifications may be made to the illustrated embodiments within the scope of the invention. For example, while it is preferred that the body of the assembly be made of extruded aluminum and the sidelight cap be made of extruded plastic, other materials such as metals other than aluminum, composites, molded rather than extruded components and other materials and fabrication techniques may also be employed. Further, the particular profiles of the illustrated embodiments, while preferred, are not intended to be limiting and other profiles might well be designed depending on the particular intended use of the assembly. These and other additions, deletions, and modifications might well be made by skilled artisans without departing from the spirit and scope of the invention as set forth in the claims.

What is claimed is:

1. A threshold assembly for installation in a handicapped accessible entryway having spaced vertical jambs extending upwardly from an entryway floor, said threshold assembly being sized to be positioned on the floor of the entryway extending between the vertical jambs and being profiled for allowing wheelchair ingress and egress through the entryway, said threshold assembly comprising an elongated body having opposed ends, said elongated body being integrally formed to define an upwardly projecting and longitudinally extending threshold portion with an upper surface aligned with and underlying a closed door of the entryway, an exterior sill extending outwardly and sloping downwardly from said threshold portion to an exterior edge of said body, and an interior sill extending inwardly and sloping downwardly from said threshold portion to an interior edge of said body, said threshold portion projecting upwardly a predetermined distance from said interior and said exterior sills to form a first dam extending along the junction of said threshold portion and said exterior sill and a second dam extending along the junction of said threshold portion and said interior sill, said first and second dams forming a barrier against migration of water from said sills past said threshold portion of said body.

2. A threshold assembly as claimed in claim 1 and wherein said elongated body is formed of extruded aluminum.

3. A threshold assembly as claimed in claim 2 and further comprising a thermal break formed along the length of said body, said thermal break being bridged by a thermally insulating material.

4. A threshold assembly as claimed in claim 1 and further comprising a sidelight cap mountable on said body covering a selected section of said threshold portion, said sidelight cap being configured to be selectively positioned on said body to underlie and support a fixed panel of the entryway.

5. A threshold assembly as claimed in claim 4 and further comprising an outwardly projecting lip extending along the upper edge of said first dam and an inwardly projecting lip formed along the upper edge of said second dam, said lips and said dams defining elongated grooves extending along the junctions of said dams and their respective sills, said sidelight cap being formed with tabs configured to snap into said grooves to secure said sidelight cap to said body and to allow said sidelight cap to be selectively positionable along the length of said body to accommodate a variety of entryway configurations.

6. A threshold assembly as claimed in claim 5 and wherein said sidelight cap is formed of extruded plastic material.

7. A threshold assembly as claimed in claim 6 and further comprising a flexible seal co-extruded along the upper surface of said sidelight cap for sealing against the bottom of a sidelight panel supported by said sidelight cap.

8. A threshold assembly as claimed in claim 7 and further comprising flexible seals co-extruded with said sidelight cap and positioned to seal against said exterior and said interior sills.

9. A continuous threshold assembly for installation in wheelchair accessible entryways having at least one openable door and at least one fixed panel flanking the openable door, said threshold assembly comprising a unitarily formed elongated body sized to span the entryway and having a profile allowing the threshold assembly to be traversed by an individual in a wheelchair, said elongated body being formed to define an upwardly projecting threshold portion positioned to extend continuously beneath a closed door of the entryway and a fixed panel of the entryway, an exterior sill extending outwardly and sloping downwardly from said threshold portion to an exterior edge, an interior sill extending inwardly and sloping downwardly from said threshold portion to an interior edge, and a sidelight cap selectively positionable along the length of said elongated body to overlie a section of said threshold portion, said sidelight cap for positioning beneath and supporting a fixed panel of the entryway;

said threshold portion of said elongated body projecting upwardly a predetermined distance from said exterior sill to define a first dam extending along the junction of said exterior sill and said threshold portion; and

wherein said threshold portion of said elongated body also projects upwardly a predetermined distance from said interior sill to define a second dam extending along the junction of said interior sill and said threshold portion.

10. A continuous threshold assembly as claimed in claim 9 and further comprising a first lip extending along the upper edge of said first dam and a second lip extending along the upper edge of said second dam, said lips and said dams defining an exterior groove and an interior groove extending along the length of said elongated body on either side of said threshold portion.

11. A continuous threshold assembly as claimed in claim 10 and wherein said sidelight cap is formed with an upper surface having an exterior edge and an interior edge, exterior and interior legs depending from said exterior and interior edges respectively of said support surface for resting on said exterior and interior sills to position said support surface over said threshold portion, and tabs projecting inwardly from said exterior and interior legs for extending into said exterior and said interior grooves to secure said sidelight cap in place at a selected location along said body for underlying and supporting a fixed panel.

12. A continuous threshold assembly as claimed in claim 11 and wherein said elongated body is formed of extruded aluminum.

13. A continuous threshold assembly as claimed in claim 12 and wherein said sidelight cap is formed of extruded plastic material.

14. A continuous threshold assembly as claimed in claim 13 further comprising a flexible seal on said support surface of said sidelight cap for engaging and sealing against the bottom of a fixed panel supported on said sidelight cap.

15. A continuous threshold assembly as claimed in claim 14 and wherein said flexible seal is co-extruded with said sidelight cap of a plastic material having a lower durometer than the plastic material of said sidelight cap.

16. A continuous threshold assembly as claimed in claim 15 and further comprising flexible seals coextruded on said exterior and interior legs for engaging and sealing against said exterior and interior sills respectively when said sidelight panel is mounted on said body.

\* \* \* \* \*